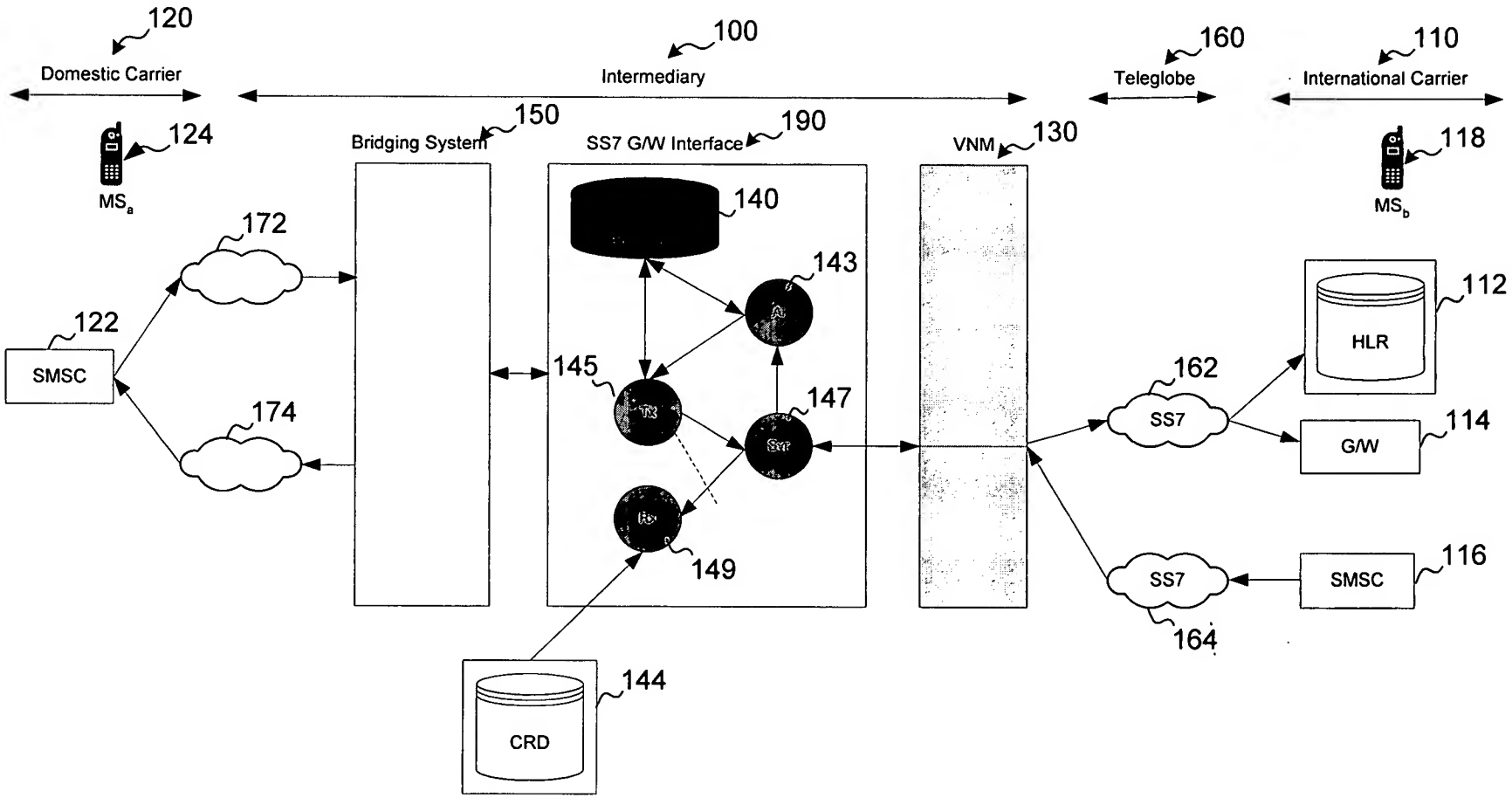
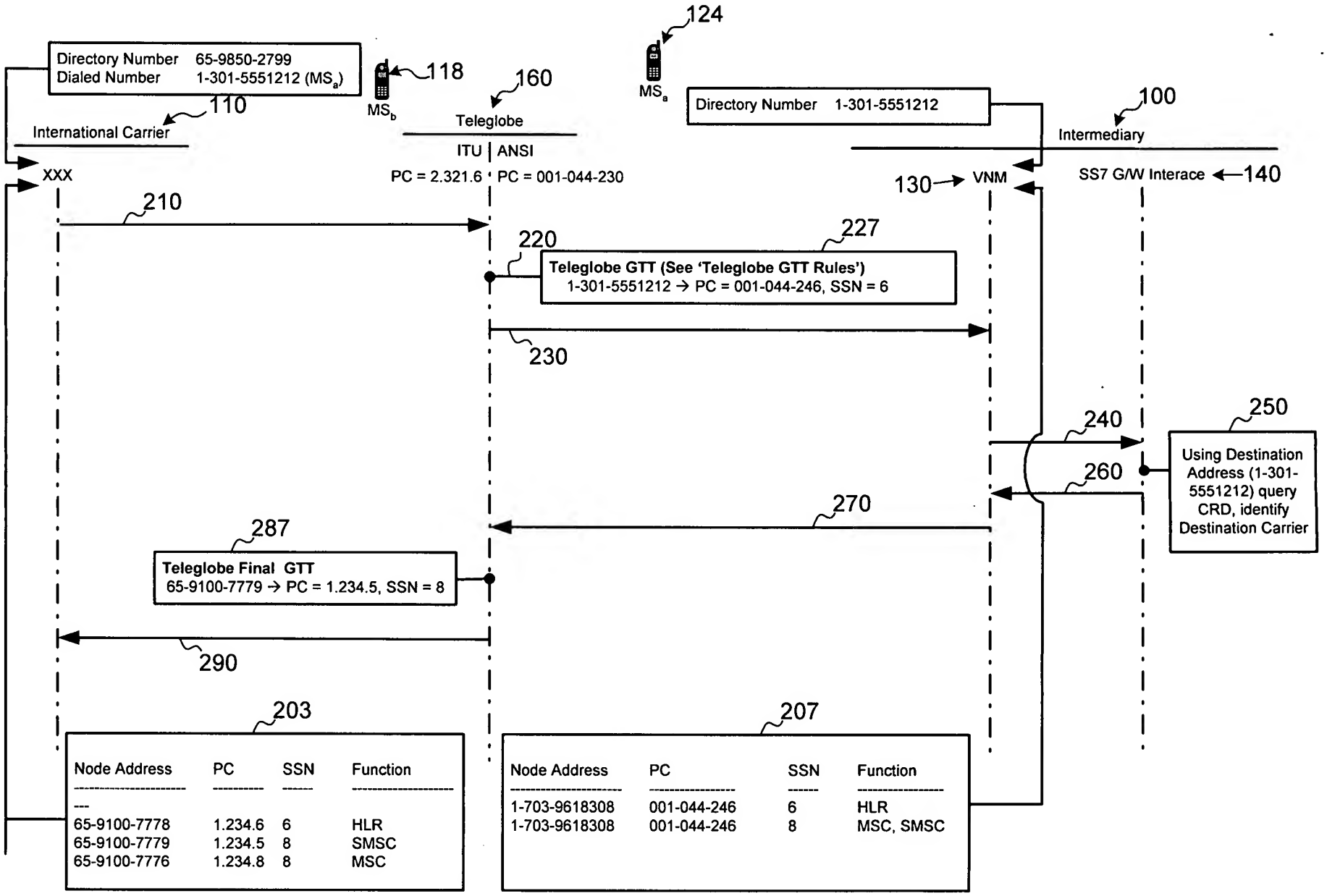

120
Domestic Carrier
100
Intermediary
160
Teleglobe
110
International Carrier
124
MS$_a$
150
Bridging System
190
SS7 G/W Interface
130
VNM
118
MS$_b$
140
172
143
122
SMSC
145
147
162
HLR
112
174
SS7
114
G/W
149
116
SS7
SMSC
164
144
CRD

FIG. 1


Directory Number 65-9850-2799
Dialed Number 1-301-5551212 (MSa)
MSb
118
160
124
MSa
Directory Number 1-301-5551212
100
110
International Carrier
Teleglobe
ITU | ANSI
PC = 2.321.6 | PC = 001-044-230
Intermediary
XXX
130
VNM
SS7 G/W Interace
140
210
220
227
Teleglobe GTT (See 'Teleglobe GTT Rules')
1-301-5551212 → PC = 001-044-246, SSN = 6
230
240
250
260
Using Destination Address (1-301-5551212) query CRD, identify Destination Carrier
270
287
Teleglobe Final GTT
65-9100-7779 → PC = 1.234.5, SSN = 8
290
203
207
Node Address PC SSN Function

65-9100-7778 1.234.6 6 HLR
65-9100-7779 1.234.5 8 SMSC
65-9100-7776 1.234.8 8 MSC
Node Address PC SSN Function
1-703-9618308 001-044-246 6 HLR
1-703-9618308 001-044-246 8 MSC, SMSC

FIG. 2

SendRoutingInfoForSM

MTP OPC	1.234.5 (SMSC)
MTP DPC	2.321.6 (Teleglobe)
SCCP CallingParty	65-9100-7779 (SMSC)
SCCP CalledParty	1-301-5551212 (MSISDN)
GSM MAP MSISDN	1-301-5551212 (MSISDN)
GSM MAP SM-RP-PRI	N/A
GSM MAP Svc Cntr Addr	65-9100-7779 (SMSC)

205

FIG. 2A

Teleglobe GTT Rules (Partial)

Number	Point Code	SSN
1-201-1110000	001-044-246	6
1-301-5551212	001-044-246	6
1-703-9618308	001-044-246	8
1-989-9969999	001-044-246	6

225

FIG. 2B

SendRoutingInfoForSM

MTP OPC	003-005-001 (Teleglobe STP)
MTP DPC	001-044-246 (VNM)
SCCP CallingParty	65-9100-7779 (SMSC)
SCCP CalledParty	Route On DPC and SSN (6)
GSM MAP MSISDN	1-301-5551212 (MSISDN)
GSM MAP SM-RP-PRI	N/A
GSM MAP Svc Cntr Addr	65-9100-7779 (SMSC)

235

FIG. 2C

SMR_GET_ROUTING_INFO

Byte	Content
1	0 (Priority Request)
2	32100 (Message Reference)
3	1 (Orig Addr Type)
4	1 (Orig Addr No Plan)
5	65-9100-7779 (Orig Addr)
26	1 (Dest Addr Type)
27	1 (Dest Addr No Plan)
28	1-301-5551212 (Dest Addr)

245

FIG. 2D

SMR_ROUTING_INFO_RESPONSE

Byte	Content
1	32100 (Message Reference)
2	310-006-1-54321 (IMSI)
23	1 (MSC Addr Type)
24	1 (MSC Addr No Plan)
25	1-703-9618308 (MSC Addr)

265

FIG. 2E

ACK

MTP OPC	2.321.6 (Teleglobe STP)
MTP DPC	1.234.5 (SMSC)
SCCP CallingParty	1-703-9618308 (Virtual HLR)
SCCP CalledParty	Route on DPC and SSN (8)
GSM MAP IMSI	310-006-1-54321
GSM MAP MSC Number	1-703-9618308 (Virtual MSC)

275

FIG. 2F

ACK

MTP OPC	001-044-246 (VNM)
MTP DPC	001-044-230 (Teleglobe)
SCCP CallingParty	1-703-9618308 (Virtual HLR)
SCCP CalledParty	65-9100-7779 (SMSC)
GSM MAP IMSI	310-006-1-54321
GSM MAP MSC Number	1-703-9618308 (Virtual MSC)

295

FIG. 2G